

GENERIC · NETWORK

U3012

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U3012

Control Module Improper Wake-up Performance

U3012 indicates that a control module on the vehicle's network did not wake up properly when commanded, meaning the module failed to transition from its low-power sleep state to full operation within the expected time. The computer detected that the wake-up signal was sent but the target module either did not respond or responded too slowly, which can leave other modules unable to communicate with it.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Network	Generic (all makes)	Medium	Professional	Network wiring and bus faults

Symptoms you may notice

- Often no symptoms besides the warning light, especially if the affected module is not critical to driving.
- Intermittent failures of systems controlled by the module, such as lighting, climate control, or body functions.
- A dead battery or repeated battery drain if the module fails to go back to sleep after the wake-up attempt.
- Multiple unrelated warning lights or communication codes appearing at the same time.
- No-start condition if the module involved is part of the immobilizer or powertrain enable circuit.
- Accessory functions that work only after cycling the ignition or waiting several minutes.

Common causes, most likely first

- 1 A weak or failing vehicle battery that cannot supply enough voltage during wake-up.
- 2 Corroded, loose, or damaged ground connections at the affected module or chassis.
- 3 Faulty wake-up signal wiring, including open circuits, shorts to ground, or chafed harnesses.
- 4 A failing control module that does not respond correctly to the wake-up command.
- 5 Network communication bus faults, such as a shorted CAN (Controller Area Network) line, that prevent the wake-up message from arriving.
- 6 A module that stays awake and drains the battery, causing subsequent wake-up failures.
- 7 Aftermarket accessories or improper repairs that backfeed voltage onto the wake-up circuit.



How to diagnose and fix it

- 1 Perform a full battery test with a conductance tester and load test, and charge or replace the battery if it fails.
- 2 Check and clean all ground connections for the affected module and the chassis, including engine and body grounds.
- 3 Use a scan tool to read all modules and record which module is reporting the wake-up fault and which modules are not communicating.
- 4 Inspect the wake-up circuit wiring and connectors for corrosion, loose pins, or damage, and perform voltage drop tests on the wake-up line.
- 5 Measure the wake-up signal at the module with an oscilloscope or multimeter to confirm it is present and within specification.
- 6 Check for parasitic draw after the vehicle sleeps to see if the module stays awake or fails to sleep.
- 7 If wiring and power are good, substitute a known-good module or perform module reprogramming per manufacturer procedures before replacement.

Wake-up faults that mimic module failure

- A weak battery is the most common cause of U3012, yet many technicians replace the module first because the battery passes a basic load test but still cannot supply the brief current spike needed for wake-up.
- The wake-up signal is often a low-current pulse or a specific voltage transition, so a standard test light or basic multimeter may not reveal a problem that an oscilloscope would show.
- Modules can set U3012 after a battery disconnect or jump-start if the wake-up sequence is interrupted, and the code may be a one-time event that clears after a few drive cycles.
- A shorted or chafed wire in the wake-up circuit can backfeed voltage to other modules, causing multiple unrelated codes that lead technicians away from the real fault.
- Aftermarket alarms, remote starters, or phone chargers plugged into always-on outlets can keep a module awake or interfere with the sleep-wake cycle, triggering U3012 without any factory defect.

Can I keep driving with U3012?

If the vehicle starts and runs normally, you can drive it to a repair shop, but avoid long trips or leaving it parked for extended periods because a module that fails to sleep can drain the battery. If the engine will not start or multiple safety systems are disabled, have the vehicle towed rather than risk a breakdown.

Tools that help

- Scan tool with bidirectional control and module communication capabilities
- Digital multimeter with voltage drop and min/max recording
- Oscilloscope for capturing wake-up signal waveforms
- Battery conductance tester and load tester
- Wiring diagram and connector pinout for the affected module
- Parasitic draw tester or clamp meter



Reading U3012

- U** Network: communication between the vehicle's control modules.
- 3** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 0** Network wiring and bus faults.
- 12** The exact fault within that area.

Often seen with

U0100 Lost Communication With ECM/PCM A · **U0140** Lost Communication With Instrument Panel Cluster · **U3000** Control Module · **U3001** Control Module Improper Shutdown Performance · **U3003** Battery Voltage

See it working

Watch the animated explainer [How a MAF Sensor Works: Hot-Wire Airflow Explained](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u3012/>

